

FIG. 1A

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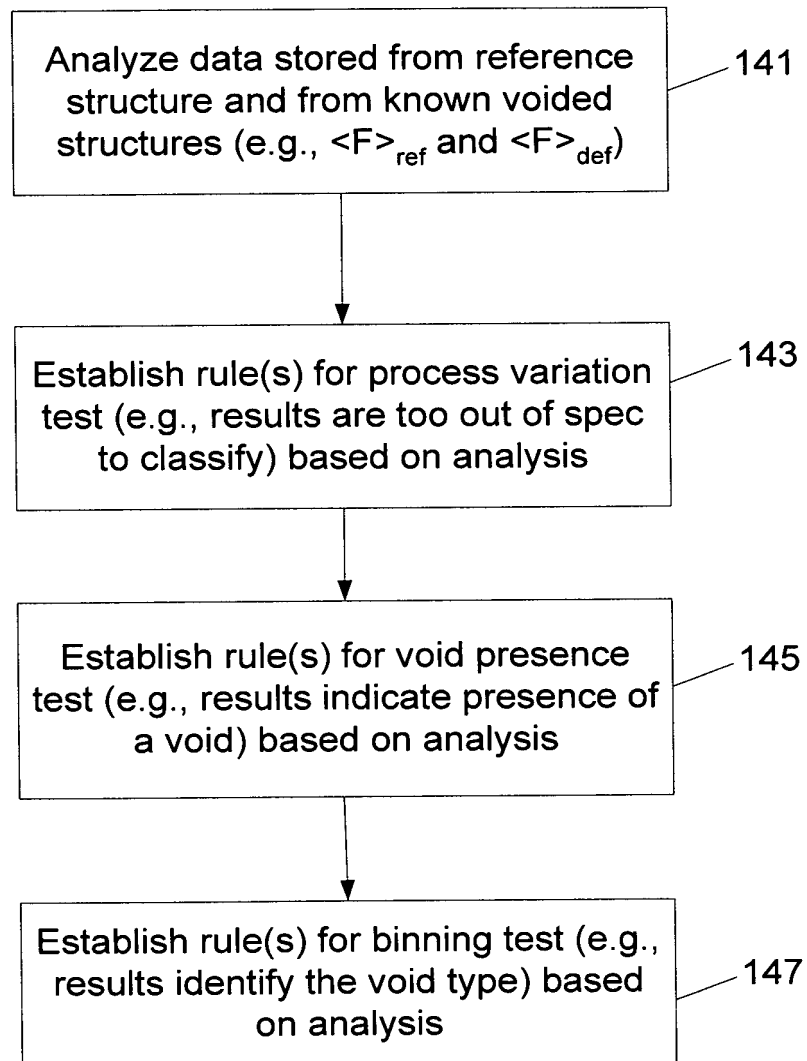


FIG. 1B

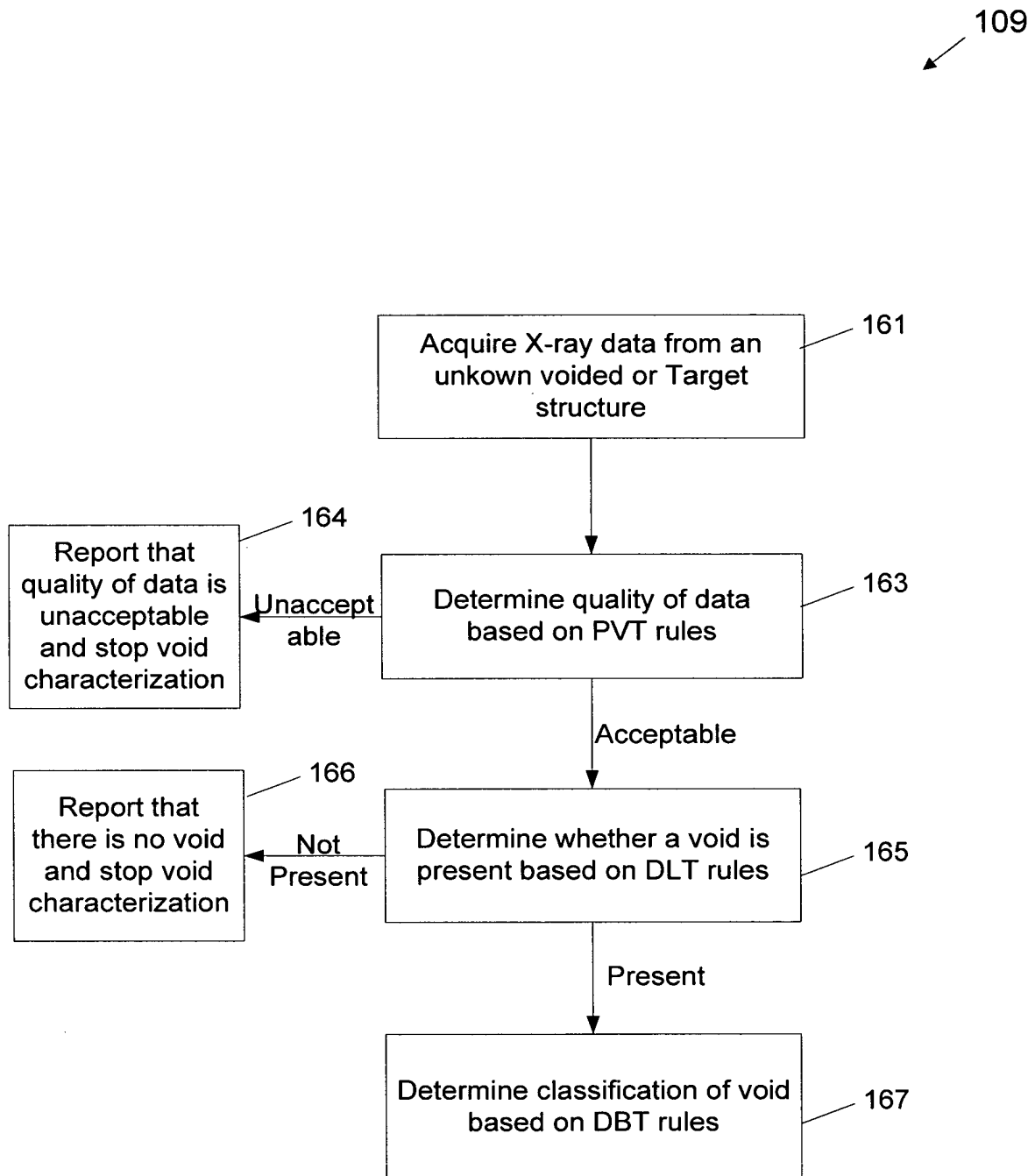


FIG. 1C

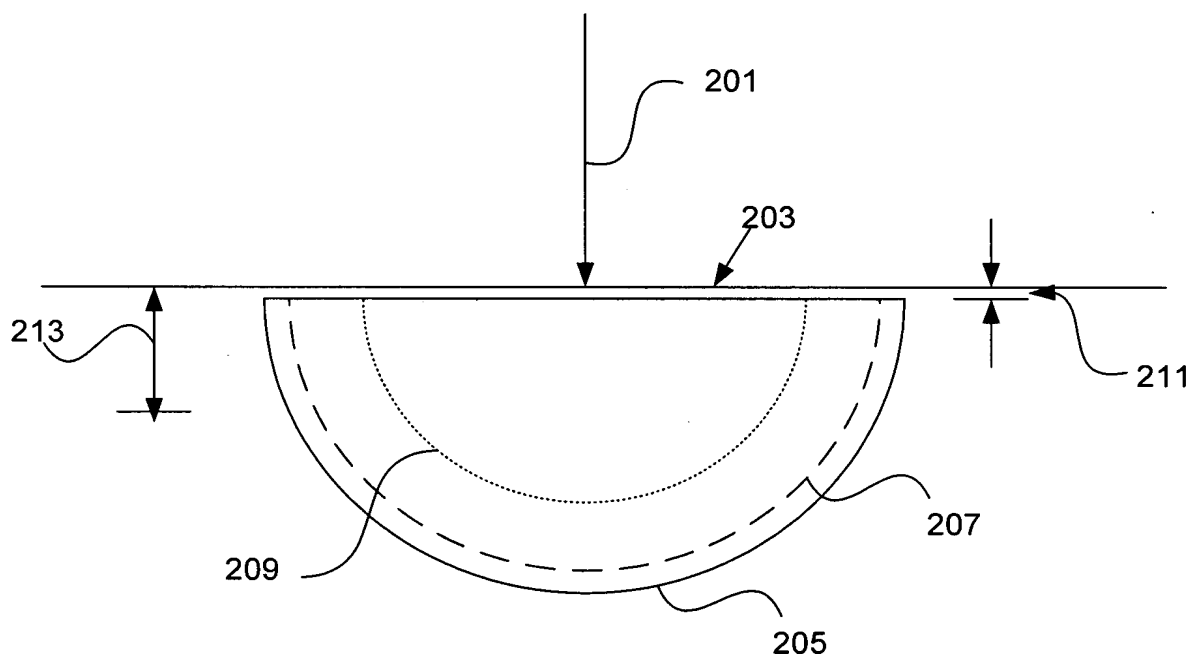


FIG. 2A

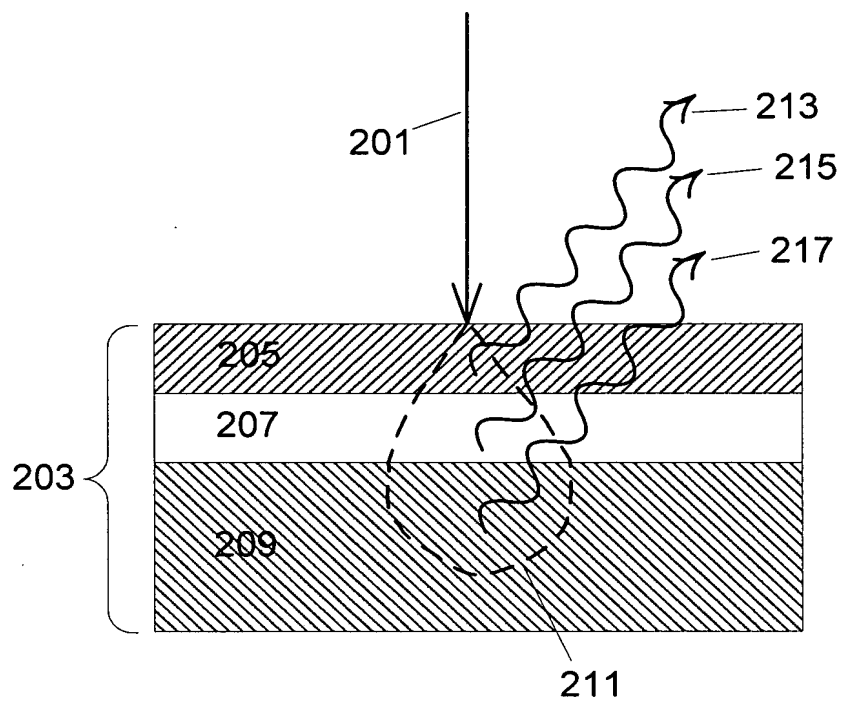


FIG. 2B

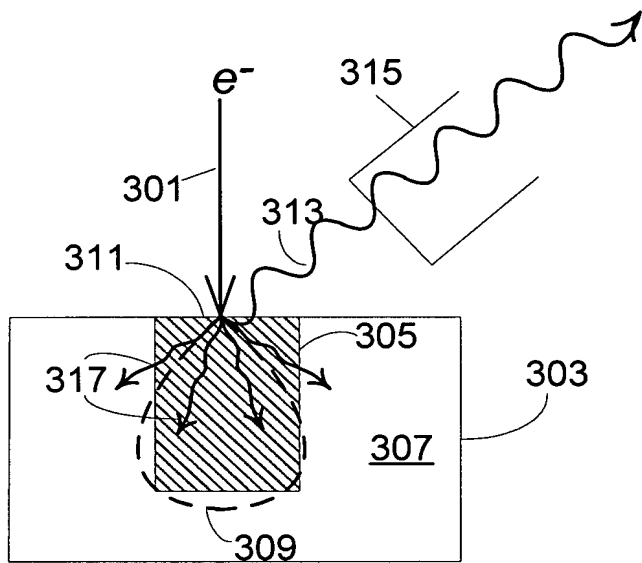


FIG. 3A

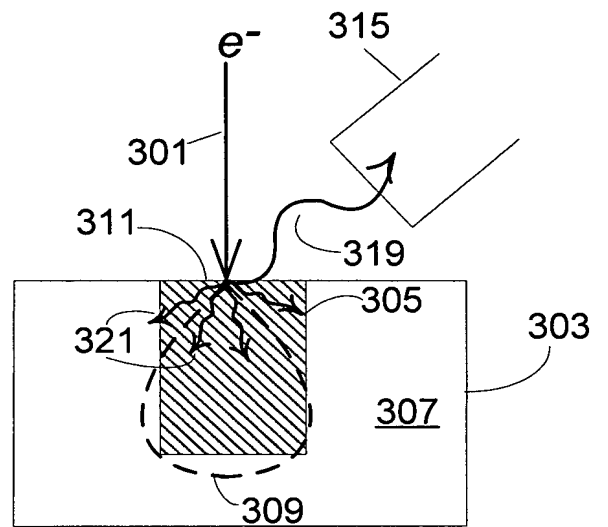


FIG. 3B

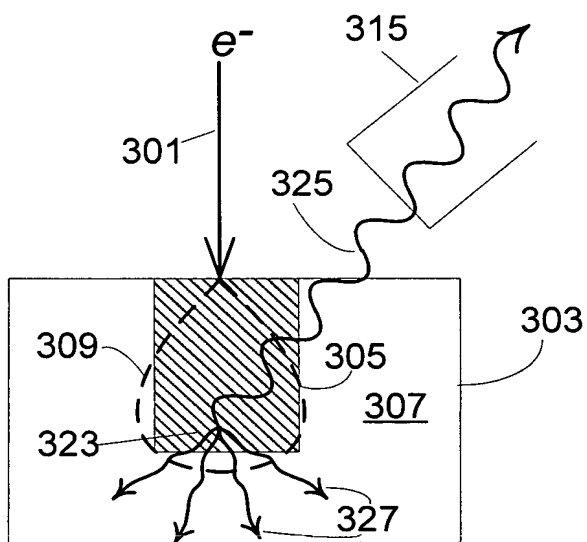


FIG. 3C

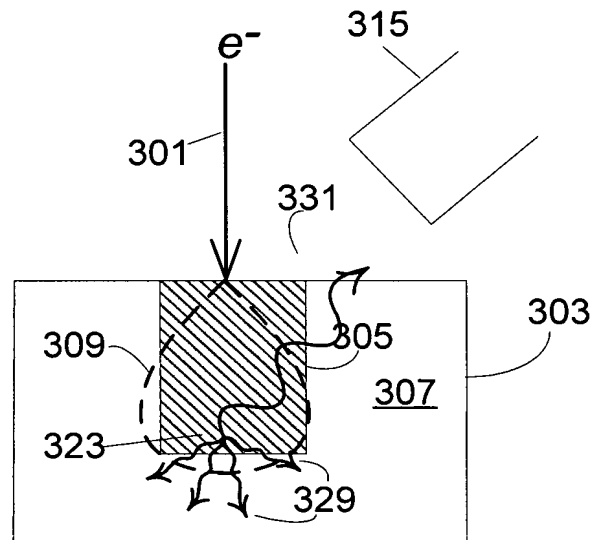
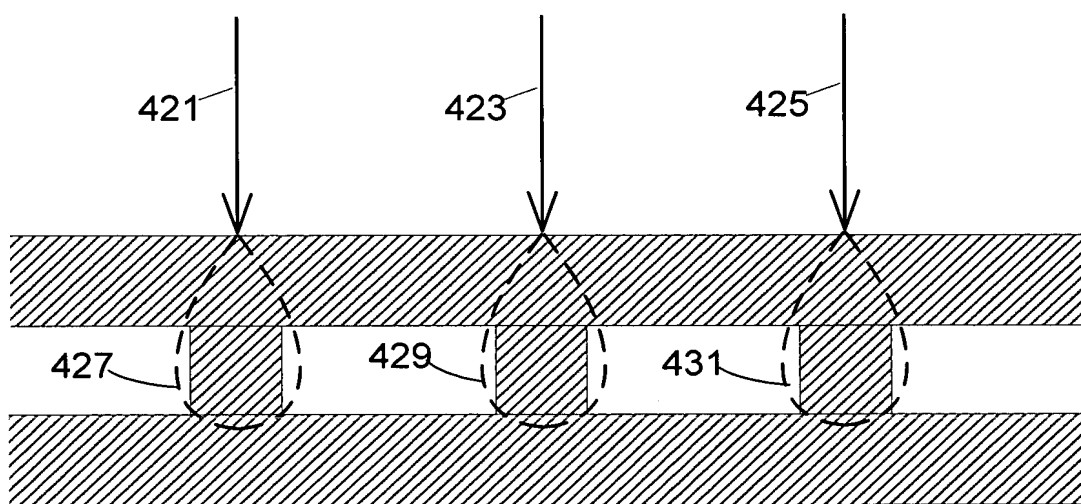
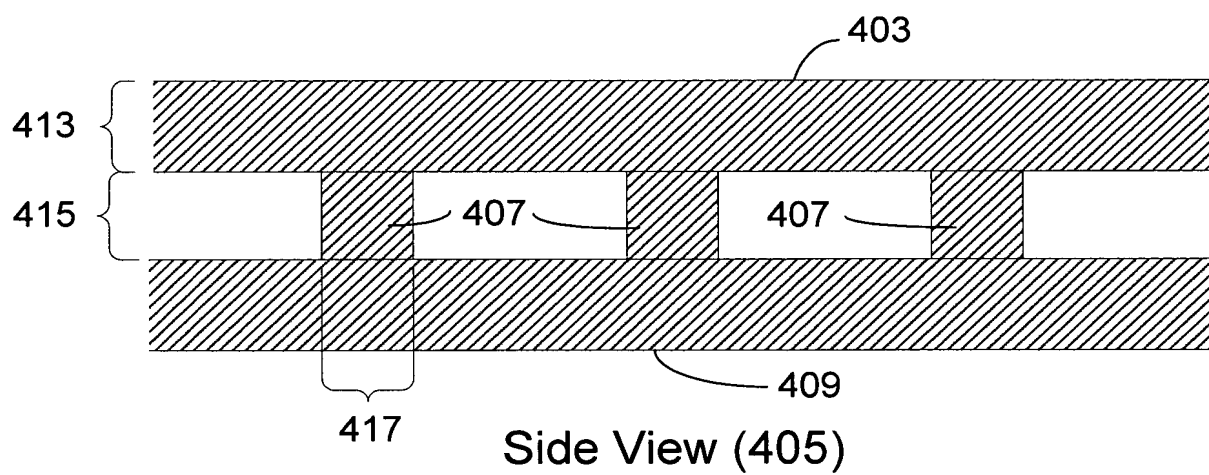
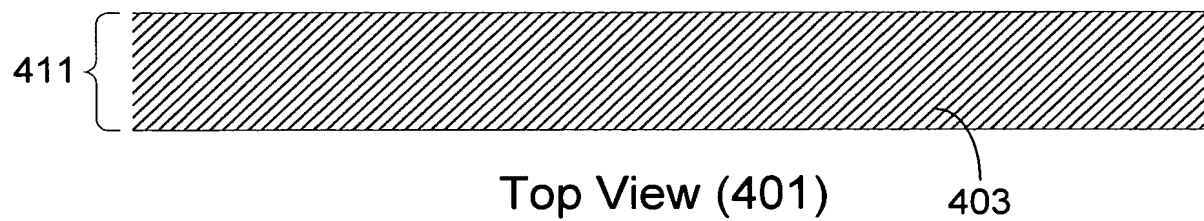


FIG. 3D



Side View (419)

FIG. 4

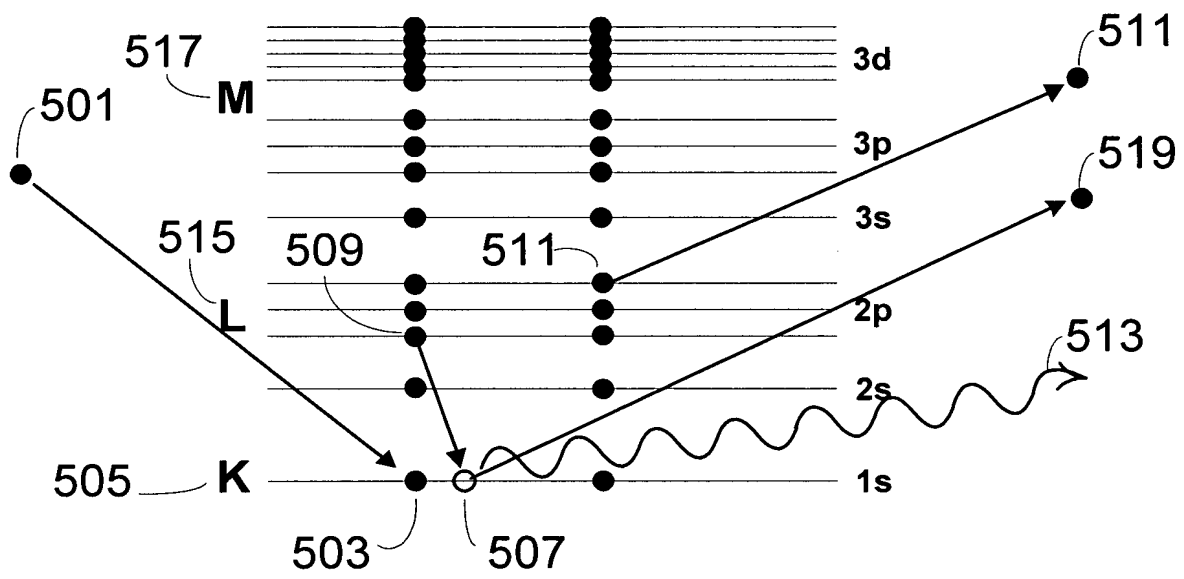


FIG. 5

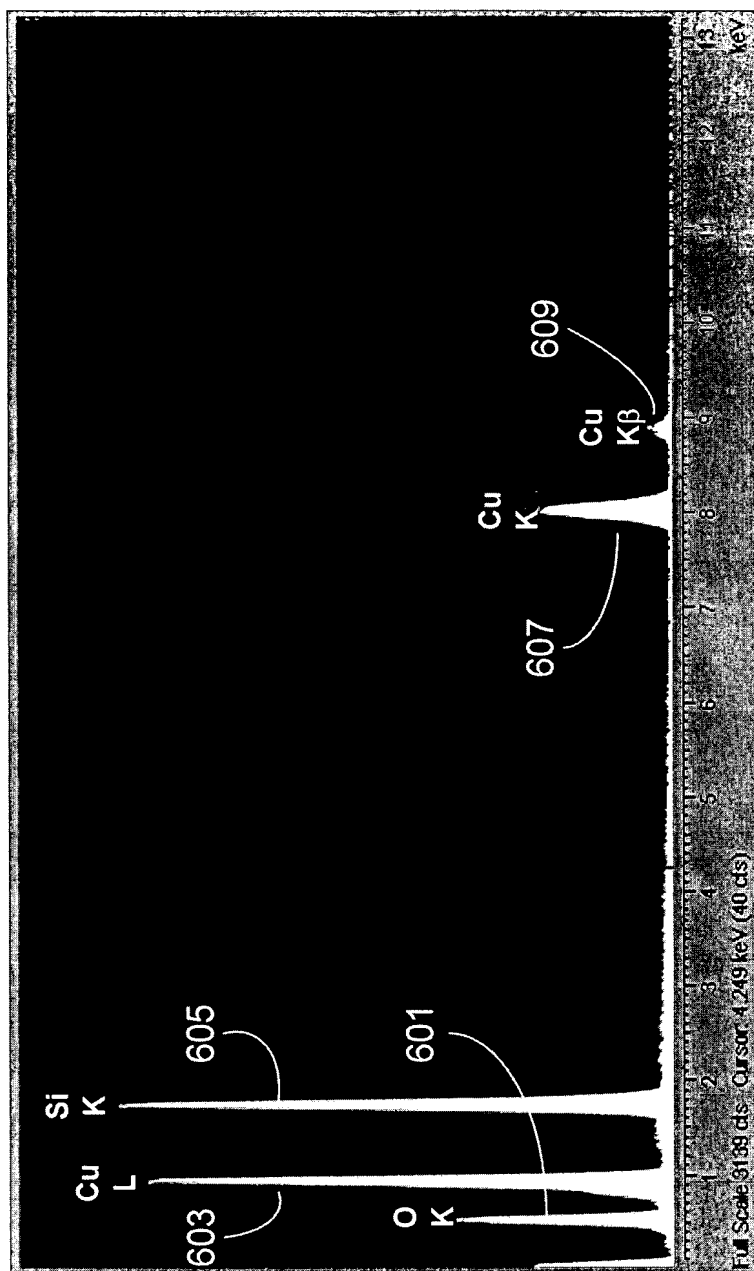


FIG. 6

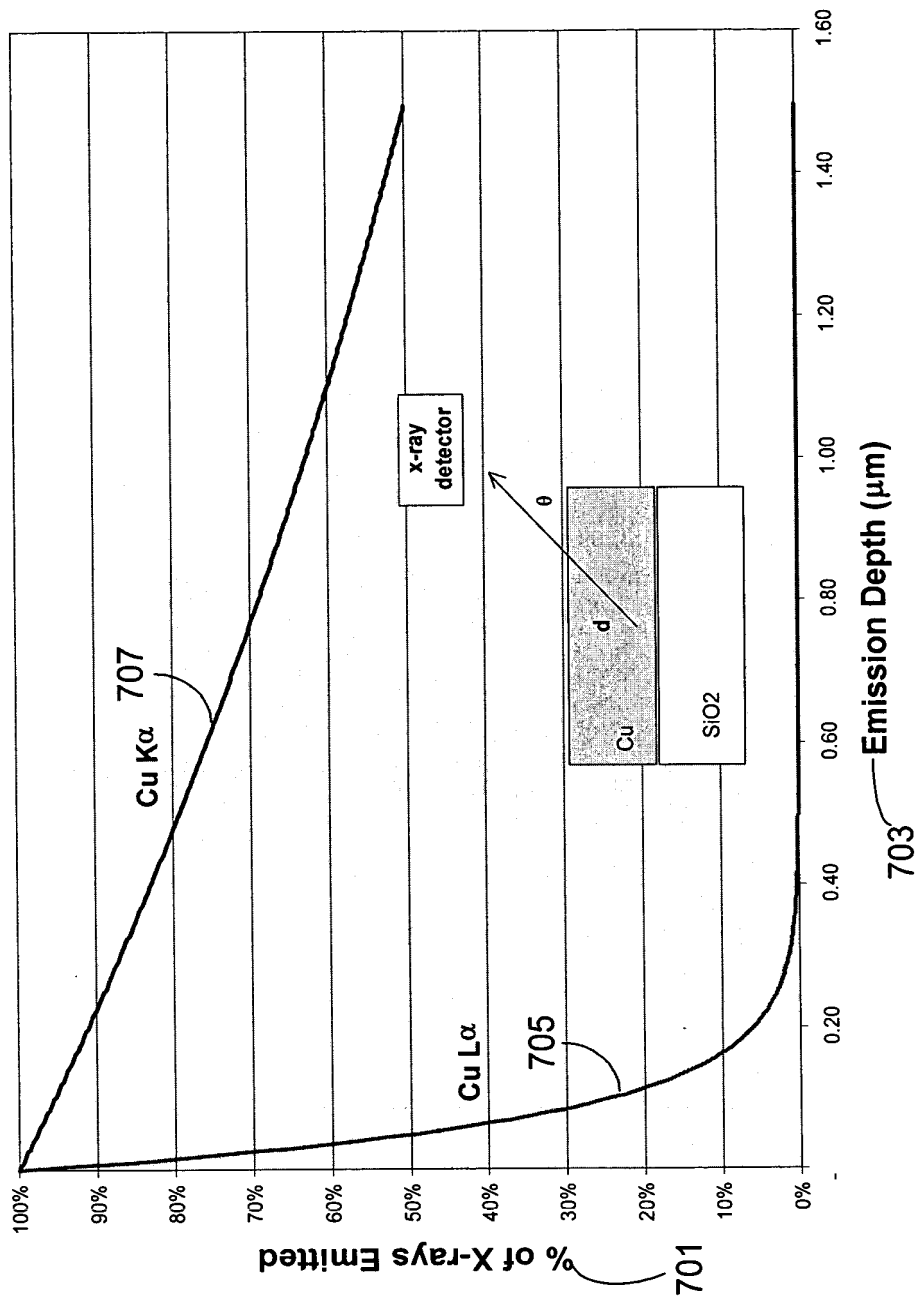
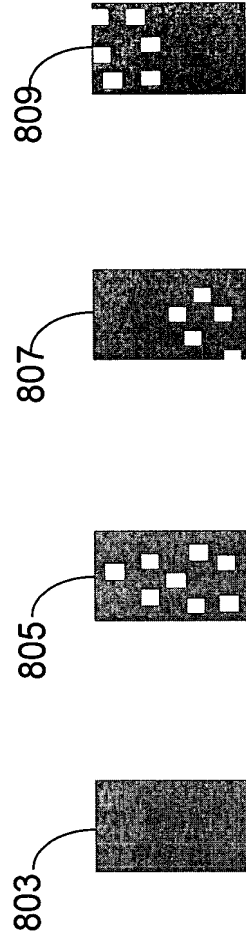


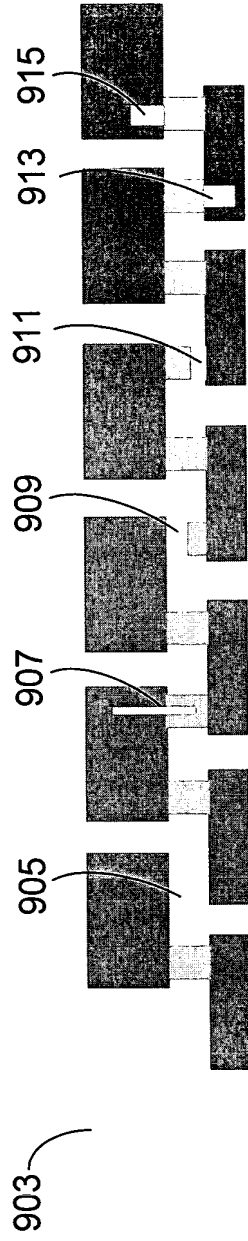
FIG. 7



Feature	No Void	Uniform Voids	Deep Voids	Surface Voids
CuL α /SiK α	=	<<	=	<<
CuK α /SiK α	=	<<	<<	\leq
CuL α /CuK α	=	=	>>	<

801

FIG. 8



Feature	No Void	Missing Via	Slit Void or Unif. Void	Partial Via top void	Partial Via bottom void	Trench Void bottom	Trench Void top
Cu α /Si α	=	<<	<	<<	<	=	<<
Cu α /Si α	=	<<	<	<	<	<	<
Cu α /Cu α	=	\leq	=	<	>	\geq	<<

FIG. 9

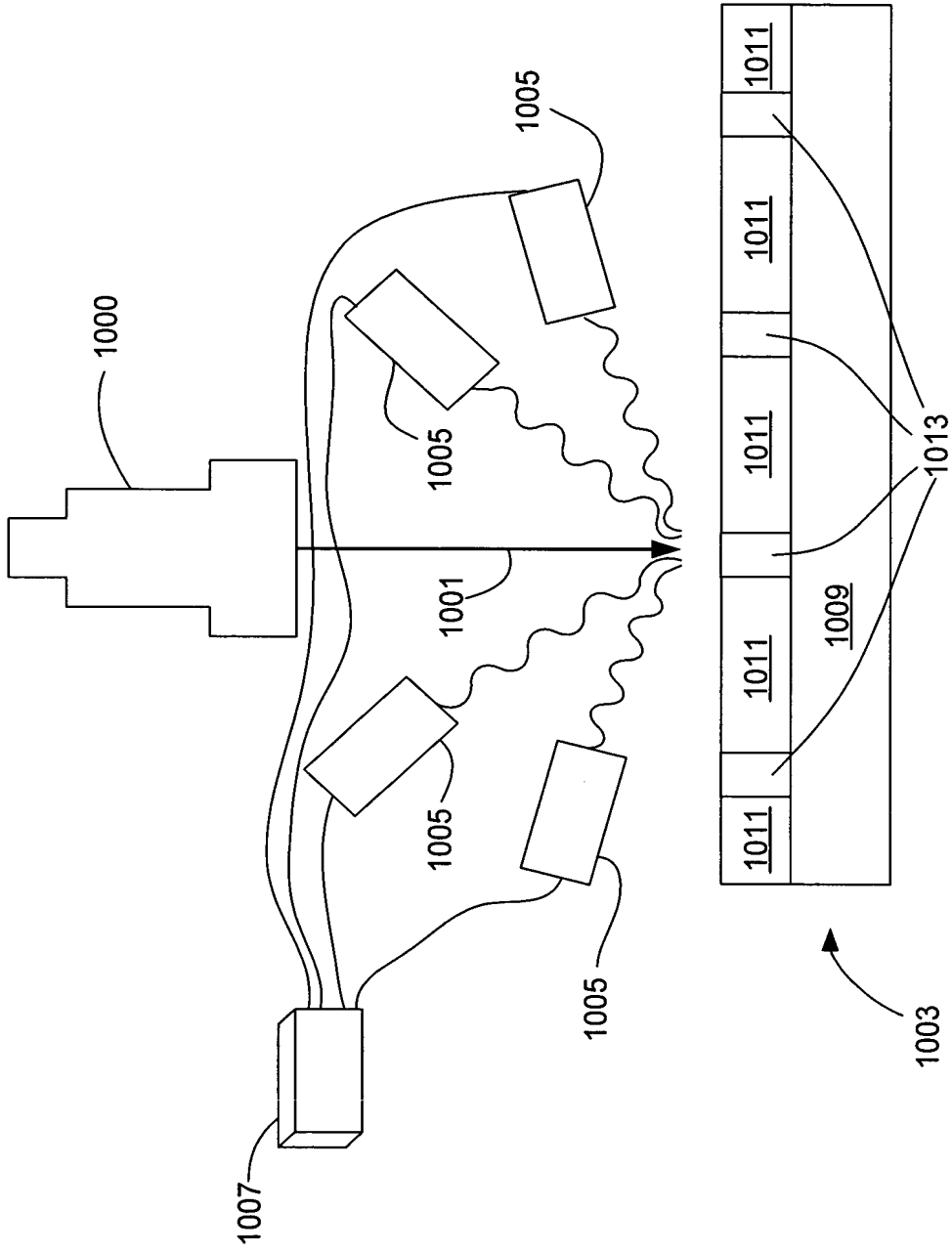


FIG. 10